Applied Photophysics Physics and Laser Chemistry

Volume B 57 1993

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PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

- 02 Mathematical methods in physics
- Measurement science and metrology
- Specific instrumentation
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 - 07.65 Optical spectroscopy and spectrometers
 - 07.75 Mass spectrometers and mass-spectroscopy techniques
 - 07.80 Electron and ion microscopes and spectrometers; techniques
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 - M Laser action in liquids and organic dyes Laser action in semiconductors
 - Laser action in solid-state lasers
 - Free-electron lasers
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Photophysics and Laser Chemistry

Albrecht H.-S., Heist P., Kleinschmidt J., Lap D.V .:

Ultrafast beam-deflection method and its application for measuring the transient refractive index of materials.

Appl. Phys. B 57/3, 193-197 (1993) PACS: 42.60 42.65

Bachem E., Dax A., Fink T., Weidenfeller A., Schneider M., Urban W.: Recent progress with the CO-overtone v=2 laser.

Appl. Phys. B 57/3, 185-191 (1993) PACS: 42.55H 42.60

Bahnmaier A.H., Jones H.:

The mechanism of the CW sodium-vapor/hydrogen laser. Appl. Phys. B 57/3, 177-183 (1993) PACS: 42.55L

Bakos J.S., Ignácz P.N., Lörincz A., Sörlei Zs., Szigeti J.:

Measurement of the vibrational energy-transfer rates in mixtures of polyatomic molecules.

Appl. Phys. B 57/2, 89-93 (1993) PACS: 34.30T 35.20 82.80

Basu S., Hagelstein P.L., Goodberlet J.G., Muendel M.H., Kaushik S.: Amplification in Ni-like Nb at 204.2 Å pumped by a table-top laser. Appl. Phys. B 57/5, 303-307 (1993) PACS: 32.30R 42.55 42.60

Bernini U., De Stefano L., Mormile P., Pierattini G., Russo P.: Thermally induced optical bistability in a new polymeric blend at room

temperature. Appl. Phys. B 57/3, 199-201 (1993) PACS: 68.35 61.40 42.70

Beyrich F .: On the use of SODAR data to estimate mixing height.

Appl. Phys. B 57/1, 27-35 (1993) PACS: 43.85 92.60 Bhar G.C., Datta P.K., Rudra A.M.:

Noncollinear ultraviolet generation in a lithium borate crystal. Appl. Phys. B 57/6, 431-434 (1993) PACS: 42.70 42.65

Billen Th., Schneider K., Kirsten T., Mangini A., Eisenhauer A.: Resonance ionization spectroscopy of thorium.

Appl. Phys. B 57/2, 109-112 (1993) PACS: 32.80F 07.75 Biswas D.J., Nilaya P., Chatterjee U.K.:

Four-branch oscillation from a dual-polarization cavity CO₂ laser. Appl. Phys. B 57/3, 227-230 (1993) PACS: 42.55E 42.60

Boscolo I., Fabbri I.:

A tunable Bragg cavity for an efficient millimeter FEL driven by electrostatic accelerators.

Appl. Phys. B 57/3, 217-225 (1993) PACS: 42.50 42.55

Brugman Th.M., Klein-Douwel R., Huigen G., Walwijk E. van,

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Laser-induced-fluorescence imaging of NO in an n-heptane- and Diesel-fuel-driven Diesel engine.

Appl. Phys. B 57/6, 405-410 (1993) PACS: 42.30 82.20

Bull G., Neisser J .:

Acoustic sounding of diurnal variations and gravity waves in the planetary boundary layer.

Appl. Phys. B 57/1, 3-9 (1993) PACS: 43.85D 92.60

Danehy P.M., Friedman-Hill E.J., Lucht R.P., Farrow R.L.: The effects of collisional quenching on degenerate four-wave mixing. Appl. Phys. B 57/4, 243-248 (1993) PACS: 34.30 42.65 33.50

Danger T., Sandrock T., Heumann E., Huber G., Chai B.: Pulsed laser action of Pr.GdLiF4 at room temperature.

Appl. Phys. B 57/3, 239-241 (1993) PACS: 42.55R

Dreizler A., Tadday R., Monkhouse P., Wolfrum J.:

Time and spatially resolved LIF of OH A² Σ+(v'=1) in atmosphericpressure flames using picosecond excitation.

Appl. Phys. B 57/1, 85-87 (1993) PACS: 07.60 42.30 82.20

Eichler H.J., Koltchanov I., Liu B.:

Numerical study of active mode locking in pulsed solid-state lasers. Appl. Phys. B 57/5, 349-357 (1993) PACS: 42.60F 42.55

Filippo A.A., Perrone M.R.:

Stimulated Brillouin scattering in SF6 with a free-running XeCl laser as

Appl. Phys. B 57/2, 103-107 (1993) PACS: 42.65E 42.65

Fisk P.T.H., Lawn M.A., Coles C.:

Laser cooling of 171 Yb+ ions in a linear Paul trap. Appl. Phys. B 57/4, 287-291 (1993) PACS: 32.80 06.30

Ghisler Ch., Lüthy W., Weber H.P.: Phase shifts in a Nd3+ fibre amplifier.

Appl. Phys. B 57/2, 99-102 (1993) PACS: 42.60D 48.81

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Laser ablation of absorbing liquids: Acoustical micro-fragmentation

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Golovlyov V.V., Esenaliev R.O., Letokhov V.S.:

Ablation of an opticaly homogeneous absorbing medium by scattered pulsed laser radiation.

Appl. Phys. B 57/6, 451-457 (1993) PACS: 87.00 42.55 43.35 61.80

Grinstead J.H., Laufer G., McDaniel Jr. J.C .:

Rotational temperature measurement in high-temperature air using KrF laser-induced O₂ fluorescence. Appl. Phys. B 57/6, 393-396 (1993) PACS: 07.60 33.50

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Imaging of flames and cold flows in air by diffraction from a laser-induced grating.

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Lasing near 200 Å with neon-like zinc and lithium-like sulfur.

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Appl. Phys. B 57/1, 83-84 (1993) PACS: 82.50F 74.70 42.55

Kallistratova M.A., Petenko I.V .:

Aspect sensitivity of sound backscattering in the atmospheric boundary

Appl. Phys. B 57/1, 41-48 (1993) PACS: 43.85 92.60

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Kawanaka J., Shimizu K., Takuma H.:

Decay rate measurement of lithium in a magneto-optical trap. Appl. Phys. B 57/2, 113-118 (1993) PACS: 07.60 32.80 34.50 Kelly R., Miotello A.:

Pulsed-laser sputtering of atoms and molecules I: Basic solutions for gasdynamic effects.

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Optogalvanic spectra of calcium in the 6090-6760 Å region. Appl. Phys. B 57/2, 123-130 (1993) PACS: 32.80 34.80 52.25 52.80

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The role of excitation parameters in high repetition-rate N2-TE laser operations

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Isotope shifts and hyperfine structure of erbium, dysprosium, and gadolinium by atomic-beam diode-laser spectroscopy. Appl. Phys. B 57/6, 373-379 (1993) PACS: 32.30B 35.10

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Suppression of stimulated hyper-Raman scattering in lithium vapor. Appl. Phys. B 57/3, 167-176 (1993) PACS: 32.00 42.65

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Multiphoton-induced X-ray emission and amplification from clusters. Appl. Phys. B 57/5, 337-347 (1993) PACS: 97.85 33.00 36.00 42.55

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Nonlinear interference between two sets of frequency conversion processes with widely spaced pump wavelengths in an optical fiber. Appl. Phys. B 57/6, 381-383 (1993) PACS: 42.65K 42.81

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Phase-matched third-harmonic generation of Nd:Glass-laser picosecond pulses in a new cyanine-dye solution.

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Two-line planar fluorescence for temporally resolved temperature imaging in reacting supersonic flow over a body.

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Vision-based system for automatic stabilization of mode, beam steer, and output power of a high-power laser.

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Monitoring air pollution related meteorology using SODAR. State of the art.

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Narrow-band extreme-ultraviolet laser radiation tunable in the range 90.5-95 nm: Application to the spectroscopy of N₂

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Studies of recombination X-ray-laser gain and gain-medium uniformity. Appl. Phys. B 57/5, 319-323 (1993) PACS: 42.55L 07.85 32.20 52.25 Yu J.R., She C.Y .:

Lidar-observed temperature structures and gravity-wave perturbations of the mesopause region in the springs of 1990-1992 over Fort Collins,

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